THE CAPITALIZATION OF PUBLIC-SERVICE CORPORATIONS.

EXAMINATION of the statutes and the judicial decisions of our American Commonwealths reveals, aside from those cases where no definite policy has ever been entertained, two distinct theories as to the proper basis for capitalization of corporations. One is that the total amount of stock and bonds issued should stand in a definite relation to the actual investment of capital in the enterprise.* The other is that capitalization should be based upon earning capacity alone, let the source of such revenue power be what it may,— property, patents, franchises, or mere good will. Under the first policy, an enterprise to be capitalized at $1,000,000 must represent that sum of money paid in at some time, either as cash or as an equivalent in tangible property. This is the policy consistently followed in Massachusetts, and somewhat less stringently perhaps in Connecticut.† Five years ago a reform in this direction was seriously proposed for New York, although little seems to have been actually accomplished.‡

The second policy presupposes that, at a market rate of 6 per cent., an earning capacity of $60,000 per year is properly capitalizable at $1,000,000, be the actual investment what it may. The franchise or the good will, it is contended, can be sold for valuable consideration. In the eyes of the law it is property during the period of its life

* For the purposes of this article both stock and bonds are alike classed as capital. *Cf.* the reasoning in *Statistics of Railways in the United States*, 1888, p. 13. The inclusion of floating debt is variously viewed in different States.

† In Connecticut, until recently, special legislation, especially in the case of street railway corporations, prevailed. For this reason the general laws mean but little, save for those traction companies organized since 1893.

‡ A special committee of the Assembly reported in favor of limiting capitalization to one and one-half times the cost of construction.

at all events.* Even in Massachusetts it is considered tangible enough to be attachable for debt.† This second policy allows the inclusion of the franchise value — that is to say, the *surplus* earning capacity over a normal return upon the investment — in the nominal capitalization. And the limit of issues of stock and bonds is fixed only by the amount of such actual or estimated earnings, as the case may be. Thus the State Commission in 1899 provided for allowance to the street railway company of Detroit of $8,000,000 for its plant and of $8,500,000 for its franchise, this latter being merely the capitalization of the surplus earnings.‡ Among our American Commonwealths the most flagrant examples of unlimited capitalization occur under the laws of West Virginia, Delaware, and New Jersey. In the first of these, no limitation whatever is placed upon stock issues beyond payment of a small registration tax. The Delaware constitution follows the usual statutory enactment of other States, prohibiting all issues of stock except for money paid, labor done, or property actually received. The absence of all administrative control, and the apparent failure of the State courts to rule adversely, naturally renders this law of no effect. New Jersey has met the issue adroitly.§ Its Corporation Act, as revised in 1896, recites that "nothing but money shall be considered as payment of any part of the capital stock"; except that any corporation may purchase property by the issue of securities, in which case "the judgment of the directors as to the value

* Numerous decisions have established this clearly, among them primarily that of the Monongahela Bridge Company, 148 *U. S.* 312; and 144 *Pa. St.* 365, in case of the Mifflin Bridge Company; and recently in *Washburn* v. *National Wall Paper Company*, 81 *Fed. Rep.* 17.

† *Public Statutes*, chap. 105, 30–38. *Cf.* the case of Brokaw Brothers, establishing that in private business good will — that is to say, capitalized *future* prospects — is not taxable. *Financial Chronicle*, lxix. (1899) p. 1086.

‡ *Street Railway Journal*, 1899, pp. 477–483.

§ *The Chicago Banker*, i., 1889, pp. 407–411, gives interesting data on the history of New Jersey legislation.

of the property purchased shall be conclusive." The status of Maine, formerly a refuge for over-capitalized companies, has been recently reversed without modification of its statutes through a decision of its Supreme Court. This has, in effect, held stockholders liable as against a judgment creditor to the amount of the balance of the capital stock at par, over and above the value of the tangible property.* This decision, based upon the theory that such stock is not yet fully paid up, has already acted as a salutary deterrent in many cases.

The best examples of the effect of the unrestrictive policy is to be found in the industrial combinations organized in the United States during the last few years. Excluding some of the peculiarly speculative ones, thirty-nine of the trusts reporting to the expert of the Industrial Commission indicate that their property owned is worth, even at prevailing high market prices, but 64.42 per cent. of their nominal capitalization.† It is rare that the preferred stock and bonds do not fully equal the value of the plant, stock and cash on hand; leaving the huge mass of common stock to represent good will or estimated earning capacity. Under British company law much the same conditions are coming to prevail. Thus the English Sewing Cotton Company's capital is atmospheric to the extent of one quarter, that of the Cotton and Wool Dyers' Association being more than half fictitious.‡ That similar inflation in the case of our railroads was formerly the rule is equally well known, honorable exception being made of a few companies, such as the Lake Shore, Chicago & Alton and the Old Colony in Massachusetts.§ It is prob-

* *Libby* v. *Tobey*, 19 *Atl. Rep.* 904.

† *Bulletin United States Department of Labor*, No. 29 (1900), p. 671. *Cf.* the cases of the United States Leather Company and the Federal Steel Company. In both the preferred stock bought the plants, while the remainder went mainly to commissions and promoters' profits. *Bradstreet's*, 1899, pp. 436 and 531.

‡ *Economist* (London), 1900, p. 532.

§ *Financial Chronicle*, lvii. p. 203; lx. p. 352; and lxii. pp. 347 and 480.

able, however, that in the case of many railroads these abuses have of late been somewhat mitigated.* Much of the water has been expunged from the poorer roads through rigid reorganization in periods of depression, such as 1893–98. And, in the case of the stronger ones, the properties have been improved from surplus earnings, so as to fill out their once too generous allotments of capital. This does not seem to be true to an equal degree in England, where over-capitalization of the railroads still seems to be on the increase, owing to their peculiar methods of finance, of which we shall have occasion to speak later.†

Two arguments in favor of permission to capitalize earning capacity or future prospects, rather than mere investment, may justly be advanced. One is that in no other way can the risks incident to a novel enterprise, repelling timid capital, be overweighted by possible profits through premiums in the form of securities purchasable at a discount. This argument, however, presupposes risk,— a condition entirely absent from many of the public-service companies, even at the outset of their careers. It also assumes that the persons who take the risk are the ones who ultimately reap the rewards. This, also, is a fallacy in too many cases; since the capital really risked in the plant is often raised on bonds, which receive but a moderate return, keeping them near par at all times; while the speculative profits come to the shareholders who acquire the stock for little or who take it for nothing as a reward for promotion.‡ The second argument has somewhat more force. Mere plant or dead property becomes profitable only through operation. This requires a quick capital in the form of credit or of cash. Without such work-

* Cf. *The Chicago Banker*, v. (1900) pp. 335–339.

† Woodlock, in the *Engineering Magazine*, xi. p. 238. *Cf.* also *Financial Chronicle*, lv. (1892) p. 1061, comparing the Pennsylvania Railroad and the Midland.

‡ On the promotion of companies see a note by the present writer in *Journal of Political Economy*, viii. p. 535.

ing capital, the plant not being a "going" concern loses much of its value.* Consequently, it is urged, capital in excess of the value of the plant may rightfully be created for this purpose, by the sale of stock or bonds. The importance of this argument in the case of private companies cannot be denied. Recent evidence tends to show that an amount varying from 15 to 175 per cent. of the value of the plant is in most of the industrial organizations devoted to working capital.† In fact, one of the powerful incentives to the formation of trusts is the desire of the individual producers to be relieved from the strain of dependence upon the banks for their quick capital. A difference between the public-service company and a private corporation is, however, discoverable in this: that, as a rule, the possession of a valuable franchise, attachable for debt, as we have seen, is sufficient security to enable working capital to be raised by the ordinary means.

The evils incident to allowing a wide divergence in either direction between actual investment and nominal capitalization are quite apparent. Among these, as applied to public-service companies, the most important of course is that all relationship between the charges to the public for service and the net profits upon the real capital concerned is obscured. The actual return upon investment can never be precisely determined without an appraisal of the property. And, inasmuch as such an inventory subverts the primary purpose of over-capitalization, it is a difficult matter to have it authoritatively taken. The case of the Lynn and Boston Street Railway Company, now pending in Massachusetts, is in point. Having been manipulated under exemption from general statutes to a

* This point was covered in the recent Newburyport Water-works award, to be discussed *infra.*

† *Bulletin United States Department of Labor*, No. 29 (1900), p. 672. *Bradstreet's*, 1899, p. 739, cites two trusts handicapped from failure to procure sufficient working capital in this way. See also *Papers* and *Proceedings American Economic Association*, 1900, p. 150.

high degree of inflation through successive consolidations, its directorate now bitterly opposes the attempt of the Railroad Commissioners to ascertain the real basis upon which its securities rest. This suggests a second fundamental evil of over-capitalization, the absence of all adequate security,—first, for the creditor, and, secondly, for the shareholders,—especially in any terminable enterprise. As to the first of these, it is obvious that borrowing capacity, while dependent upon current revenue for its interest, must ultimately rest upon the attachable property for final security. And the maintenance intact of this capital—too often taken as synonymous with property—is one of the leading objects of the law regulating limited liability.* As for the possible losses of shareholders in an over-capitalized concern at its dissolution, the danger in most of our public-service companies would seem to be remote. For the franchise grants to the older companies being perpetual, and the growth of population steadily enhancing profits, dissolution can never mean more than a resale at high prices or merger in a succeeding corporation. Only under the newer forms of terminable franchise may such loss probably occur to the shareholders. And it is to be presumed that they will safeguard their interests, or at least should be compelled to do so, by a policy of amortization and of writing off for depreciation.†

The rigid policy of Massachusetts respecting its public service corporations is in large measure an outgrowth of

*The inadequacy of the law to prevent dividends paid at the expense of capital, especially in England, is well described in the *Economic Journal*, x. (1900) p. 9; and the *Economist*, 1888, p. 407, and 1890, p. 919. Dicksee, *Auditing*, is also very good. Where the law permits the bonding of an enterprise up to the full amount of the capital stock, security for this indebtedness can only be attained by keeping capitalization well within the value of tangible plant. The stricter Connecticut and Nebraska laws, limiting bonded debt to one-half and two-thirds of the capital stock respectively, would seem, from the creditor's view-point alone, to permit of a greater latitude in this respect.

† On the practice of English companies, liable to purchase by the municipalities, see *Economist*, 1898, p. 349.

its hereditary policy towards the domestic railroad companies, somewhat halting at first, but afterwards clearly defined by its eminent board of Railroad Commissioners. The corporate evil of railroad stock issued merely as a bonus to stimulate the sale of bonds which are in themselves sufficient to defray all expenses of construction has never been tolerated. Its railroads have to a greater extent than in any other State, perhaps, been built by sales of stock rather than of bonds, such stock being marketed at a respectable percentage of its face value. The result has inevitably been that, with the assured success of the enterprise, the stock has risen far above par instead merely, as when issued as a bonus to bond purchasers, of rising towards par. The consequence has been that, with prosperous roads like the Boston & Albany, frequent applications arise for right to issue new stock to keep pace with growing value of the plant. And the resultant anti-stock-watering agitation has kept the matter before the public. The focus of attention of late years, however, has shifted to the gas, electric, and street railway companies. The most explicit statement of policy, crystallized into law, is found in the anti-stock-watering laws of 1894 and 1896.*

The effect of the conservative policy in Massachusetts appears in the accompanying table representing the capital stock and funded debt of various street railway companies. In no type of public service corporations have the evils of over-capitalization been pushed to greater excess than in the case of this class of corporations. Several causes seem to have co-operated to bring about this result. In almost all our cities, profits dependent upon gratuitous franchise grants have almost in a night become so large as to require concealment. Then again, the progress of the industry has been so rapid since the first electric street road was operated in Richmond, little

* Acts of 1894, chaps. 350, 450, 452, 472; and of 1896, chap. 473.

more than a decade ago, that revolutionary changes in equipment have been necessary. These, in turn, have invited financial manipulation at each turn-over and replacement, just as we know that discoveries of new means of gas manufacture have opened the way to inflation.* And, finally, the rapid growth of urban centres has in itself compelled a great extension of track and of service leading to pooling and consolidation, with all their attendant opportunities. We may instance the Chicago street railways as a case in point, with their more than doubled mileage from 1886 to 1896, each mile of track having increased, moreover, in average capitalization from $66,000 to $126,000.†

CAPITALIZATION PER MILE OF TRACK, 1899.

STOCK AND FUNDED DEBT.

(*Street Railway Journal*, October, 1899.)

London street railways	$79,632
New York street railways	201,381
New York elevated railways	662,520
Chicago street railways	118,334
Chicago elevated railways	873,231
Berlin street railways	74,708
Brooklyn street railways	119,072
Philadelphia street railways	265,510
Liverpool street railways	94,494
Eastern Massachusetts street railways	61,972
Boston street railways	100,615
Glasgow street railways	54,866
St. Louis street railways	306,644
Cleveland street railways	96,585

(*Massachusetts Railroad Commissioners*, 1898.)

Massachusetts street railways	$46,600
New England street railways	49,500
New York State street railways	177,800
Pennsylvania street railways	128,200
United States street railways	94,100
Great Britain street railways	47,000

* *Quarterly Journal of Economics*, xiv. (1900) pp. 509–536.

† *Illinois Bureau of Labor Statistics*, 1896, on "Franchises and Taxation," p. 48.

(*Eleventh Report Statistics of Railways.*)

United States steam railroads	$60,000
New England States steam railroads	60,000
Middle Atlantic States steam railroads	111,000
Southern States steam railroads	45,000

Scanning this table, the relatively low capitalization of the Massachusetts and New England companies stands forth clearly, especially in contrast with those of New York and Pennsylvania. St. Louis heads the list, with the extreme case of a capitalization averaging five times that of the steam railroads of the United States.* Philadelphia and New York are not far behind in this regard.† Nor can it be admitted that the service is less efficient in Massachusetts than in either of the other cases. Even for New York State as a whole, with a goodly proportion of suburban roads, which, of course, lower the average, the capitalization is three times that of the steam roads of the country at large, and 50 per cent. greater than that of the railroads in the Middle Atlantic States.‡ It is probable that the average for Massachusetts and New England is somewhat depressed by a relatively greater proportion of purely suburban lines, built at minimum cost. The same factor of low cost also explains in some measure the relatively low capitalization of the European roads. Many are still operated by horse-power or by light electric service, so that comparison with our own country is largely vitiated thereby.

That the policy of Massachusetts in attempting to keep capitalization down to actual investment has been fairly successful is attested also by a second table, which com-

* See *Report of the Missouri Commissioner of Labor*, 1896, for history of this company.

† See the extended tables of financial characteristics in the *Street Railway Journal*, October, 1899, pp. 680–684, as also the *Report of Special Committee of the New York Assembly upon Municipal Ownership of Railroads*, 1896.

‡ Cf. *Report of the Massachusetts Committee on Relations between Cities and Towns and Street Railway Companies*, 1898, p. 37.

pares for Massachusetts the sworn returns of cost with those of capitalization.

COST AND CAPITAL INVESTMENT PER MILE.

(*Massachusetts Railroad Commissioners*, 1897.)

	Construction.	Equipment.	Real Estate.	Total.	Capital.
Massachusetts, 1887 .	$17,600	$8,300	$9,700	$35,600	$32,700
" 1893 .	26,800	11,700	15,500	54,000	53,400
" 1896 .	23,400	9,800	12,800	46,000	46,400
West End Co., 1896 .	$56,600		39,800	96,400	100,700
Worcester Co., 1896 .	41,500		6,500	48,000	45,000
Springfield	25,000		8,800	33,500	31,000
Holyoke	23,700		9,400	33,000	31,000

The agreement between the last two columns, for a few companies chosen from a long list, as typical of varying conditions of service, is as close as need be. Discrepancies, where they occur, tend rather to excess of tangible assets over capital liabilities than the reverse.* Assuming the maximum cost of a street railway adapted for heavy service, and exclusive of real estate holdings, to be not far from $65,000 per mile, the immense over-capitalization of surface roads in other parts of the country becomes at once apparent.

The regulation of the capitalization of gas and electric light companies in Massachusetts has not been less effective in this direction, dishonorable exception being made lately of the city of Boston. Judging by the latest returns, the majority of the larger companies show a surplus of tangible assets over stock and bonds of from one-third to one-half of their total capital. Thus the Cambridge Company, capitalized at $700,000, has a surplus of $358,000; Fall River, capitalized at $450,000, surplus $160,000; Lowell, capital $500,000, surplus $334,000;

* Certain cases occur, as of the West End Company, now leased to the Boston Elevated Railroad. Cf. *Report Massachusetts Railroad Commissioners*, 1898, pp. 140–155. The first lease proposition was revoked because the capitalization was $26,340,000, while the plant was worth but $25,600,000.

and so on.* The old Boston Gas Company, capitalized at $2,500,000, actually paid taxes upon $4,129,000, so completely was it swamped by a huge surplus.† The aggregate balance sheets of all companies in the State in 1899 showed a total capital of $24,878,000, with a surplus of assets over and above this of $8,115,000, upwards of a million dollars being charged to reserves and depreciation at the same time.‡ In fact, exclusive of Boston, the main problem for the gas companies was as to the proper disposition to be made of these surpluses, as we shall see. The contrast with the situation in New York is adequately illustrated by the facts in that city in 1885, when, with a property worth not over $20,000,000, the Consolidated Gas Company was capitalized at $45,000,000.§

Assuming that the conservative policy of strict limitation of capitalization, as exemplified in Massachusetts, is the safer one in the case of public-service corporations, we are at once confronted by a perplexing question: What should be the standard by which the proper volume of stock and bonds is to be measured? A number of possible ones suggest themselves. Among these, we may profitably consider, in turn: first, the total original cost or actual investment from the outset; secondly, the reproduction cost of the plant under present conditions; thirdly, the "structural value,"—value, that is to say, for service and wear, irrespective always of earning capacity; and, in the fourth place, market value, or the price obtainable at open sale. To show how widely different these may be, we may cite the leading case of the Interstate

* From *Investigation of Boston Gas Companies*, Committee on Manufactures, March, 1900, tables presented by G. W. Anderson. (Pamphlet.)

† *Supplement Annals of American Academy of Political Science*, May, 1900, p. 41.

‡ *Fifteenth Report Gas and Electric Light Commissioners*, 1900, p. 97.

§ *Report Special Senate Committee to investigate the Supply of Gas in New York*, 1885, p. 12.

Consolidated Railroad Company.* Operating both in Rhode Island and Massachusetts, it had obtained a charter from the former State, with the right to issue stock and bonds to the amount of $650,000. It then applied to the Railroad Commission for authority to issue this amount under the Massachusetts charter as well. The original capitalization of a defunct predecessor had been $875,000, of which only about $470,000 represented the actual investment, the remainder being water. Owing to the fall in prices of electrical equipment, it was established that the plant could be duplicated for about $400,000. Its present structural value was estimated to be not over $255,000, while the price paid for it at public auction by its then present holders was $152,000. Excluding the possible basis of capitalization upon earning capacity, which ranged upon estimate from nothing to $900,000; which of these other standards, between $470,000 and $152,000, ought rightly to be applied? This particular case happened to be simplified by a late change of ownership at forced sale, through which the actual capital invested in the enterprise by the petitioners was known. This being shown, with immediate improvements projected, to amount to $317,197, the board authorized a capitalization of $317,200 in conformity thereto. Had the case, as in ordinary practice, been one of petition for new capitalization by the original company, the decision would have been less easy.

It would seem as if, in an enterprise still in the hands of its projectors, *the original and total cost* might be a fair criterion for capitalization. Such would seem to have been the norm first adopted in Massachusetts. "As the established rule of our law, the capital stock of every business corporation must represent the cash actually contributed by its stockholders,—no more and no less." † Or,

* *Report Massachusetts Railroad Commissioners*, 1896, pp. 165-172.

† Ibid., p. 171.

quoting from a private letter from one of the Railroad Commissioners in Connecticut, "The capital in an enterprise is the amount put into it at the time when the enterprise was initiated; although it would cost less to embark in the same undertaking to-day." The latest revision of German company law follows this policy also, in allowing all property to be taken at cost price, minus depreciation, notwithstanding the fact that its actual value is less.* There are many valid objections to this rule. The State cannot permit the capitalization of dishonesty, of extravagance, or of incompetence; nor can it permit the burden of obsolete industrial processes or administration to be laid upon future generations. Capital may have been needlessly wasted, as in the case of many Western railroads, through construction companies,† or as in the recent scandalous electricalization of the Third Avenue Railroad in New York City. Legitimate expenses of incorporation may be very heavy, as in England; or large expenditures for entirely improper purposes, as in "kissing" bills through legislatures, may have been made. The money may have been actually expended by the promoters, as Jacob Sharp undoubtedly paid many hundred thousand dollars in 1883 for the franchise of the Broadway Surface Railroad Company.‡ This represents real capital invested. Had it been legitimately spent in openly bidding for a franchise, its capitalization might have ensued without question. Or, again, consolidation of various companies, necessary for unity and efficiency of service, may perhaps be attainable only through purchase or control of contributory or supplemental systems. These are to be

* *Economic Journal*, x. p. 13.

† The device of the construction company is still utilized for evasion of strict capitalization laws. Two companies have been privately cited to me in which the actual cost of installation to the construction companies, which were identical in *personnel* with the parent corporation, were $62,000 and $211,000 respectively. The contracts for this work were let, however, at $100,000 and $500,000.

‡ An excellent account is given in *Municipal Affairs*, iv. (1900) pp. 139 *et seq.*

had only at an exorbitant price. Such, for example, has been the case in most of our large cities, where fancy prices have been paid for local companies; such prices being far above any actual franchise value based upon future earnings. An earnest advocate of street railway interests naïvely observes in extenuation of the admitted fact of over-capitalization that the present high valuation is probably not in excess of the cost of equipment *plus* the cost at the present time of purchasing the rights of way.* Such expenditures may be the necessary forerunner of successful operation. Shall a return upon them as capital stock be denied? This cannot be done so long as the criterion of original investment obtains.

These fundamental objections against original investment as a basis for capitalization have led to general acceptance of the *cost of present reproduction* in its place. This is the norm usually accepted by judicial appraisers, as in the recent case, still pending in the courts, concerning purchase by the city in 1895 of the Newburyport Water-works.† It seems to have been adopted also in appraisal of the Milwaukee street railroads in 1898 as well as in Detroit.‡ It is the one recognized by the Massachusetts Railroad Commissioners in their regulation of capitalization.§ The Gas and Electric Light Commissioners in the same State also adhere to it closely in fixing the price of product. This is plainly evidenced in the case of the Brockton Gas Company in 1895. The board ordered a re-

* *Street Railway Journal*, 1897, p. 212. German company law applies well here in prohibiting the charge to assets of any item above cost price. Thus, if it cost nothing, it must not be allowed to swell the capital account.

† Bill of Complaint, in case of *Newburyport Water Co.* v. *Newburyport*, United States Circuit Court, District of Massachusetts, No. 924, p. 12. Also raised in the case of Mifflin Bridge Company, *Pa. St.* 144, p. 36, where, the bridge being swept away while the case was pending, the cost of its duplication became involved.

‡ *Street Railway Journal*, 1898, p. 397, and 1899, p. 480.

§ *Cf.*, for example, the West End Street Railway lease in Boston. *Massachusetts Railroad Commissioners*, 1898, pp. 140–155.

duction of price, maintaining that the company was justified in earning dividends only upon the cost of duplicating the plant. In the words of the decision, "The profits of companies supplying this kind of public service must compare favorably with those which a new company might need to pay a fair dividend when fully equipped to render the same service." * Such is the apparent intention of the laws in most States which make any attempt at regulation of this sort.†

It is apparent at once that this substitution of duplication price for original investment shifts the base entirely; inasmuch as prime cost bears no necessary relation whatever to present value, even supposing the investment to have been wisely and properly made. Recent as the trusts are, twenty-four of those reporting to the Industrial Commission state the original cost of their plants to amount to 73.22 per cent. of their nominal capitalization, while the cost of reproduction amounted to only 64.42 per cent. of the same.‡ The divergence between the two is of course most notable in the case of those businesses in which methods and processes are rapidly changing. The electrical industries, characterized by a rapid fall in the costs of equipment since 1893, will serve as examples. Electric motors, costing perhaps $2,850 in 1891, may be replaced to-day in greatly improved type for perhaps one-third of that price. Instances may be cited where the entire cost of a suburban street railway has decreased from $35,500 in 1892 to $22,600 per mile in 1899.§ Equally great have been the changes in cost of plant to the electric lighting companies, entailing serious problems of regulation of capitalization and of price for the Massa-

* *Eleventh Annual Report*, p. 14, cited by J. H. Gray in *Quarterly Journal of Economics*, xiv. p. 531.

† Cf. *Bulletin Department of Labor*, No. 29 (1900), p. 670.

‡ Ibid., p. 671.

§ *Street Railway Journal*, 1898, p. 381, and 1899, p. 402.

chusetts Gas Commissioners.* The steady fall in the duplication value of these plants has, on the strictest interpretation of the Massachusetts policy, amounted virtually to an impairment of capital, due, however, to no fault on the part of the companies themselves. And it has greatly hampered them in the acquisition of new capital for additions to the plant. The public convenience in the matter of extensions of electric lighting must have suffered severely, had not the companies been allowed greater latitude than the original statutes apparently contemplated in this regard. As a rule, they have been granted time in which, by retrenchment and reduction of dividends, this deficiency may be remedied. On the other hand, the movement of prices oftentimes becomes of advantage to companies desirous of swelling their capitalization. Thus a street railway equipped with steel rails during the industrial depression of 1893–98 at $22 a ton may now find this portion of its property appraisable at upwards of $35 per ton or presently dropping again to the new price for 1900 of $26 per ton. Here is a distinct fluctuation of more than a third in the value of tangible property upon which capitalization may be based, according to the law.† Nor does it seem to be possible for the Railroad Commissioners to deny the rightfulness of such a demand. Cases are on record, even, where changes of price between the time of purchase of equipment and of application for issues of stock with which to pay for it have been taken into account, so strictly is the statute interpreted.‡

Corroborative proof of the strictness of the Massachu-

* See, for example, their *Fifteenth Annual Report*, 1900, pp. 22, 29, and 32.

† The analogy to the case of a trust company whose capital is invested in securities of fluctuating value is close. *Cf.* the English case of *Verner* v. *General and Commercial Investment Company*, cited in Dicksee, *Auditing*, p. 467. See also *Economist*, 1900, p. 147, and 1890, p. 1504.

‡ In Connecticut, where greater reliance upon original investment seems to be placed than in Massachusetts, the only case where cost of reproduction is taken into consideration is in case of petition for an issue of bonds, which under the law must never exceed one-half the cost of construction and equipment.

setts policy is shown in another way by the table on page 115. Comparing the returns as to tangible assets for Massachusetts as a whole, year by year, a steady increase in valuation is shown from 1887 to 1893, while thereafter an equally noticeable decline is apparent. The cause of this is obvious. The year 1887 marks the early stage of electrical operation, with a low average due to the inclusion of many horse roads and a light electrical equipment at best. Down to 1893 a phenomenal development of electricalization ensued, with high prices, due both to great demand and to costly and cumbrous modes of manufacture. Since 1893 the effects of industrial depression upon prices, the satiation of the demand for electrical transformation, and a notable economy in manufacturing processes have all combined to reduce the expenses of construction and equipment. Note, then, the close correspondence between this phenomenon and the average capitalization, as shown in the last column. The notable decrease is not due to the expulsion of water, but merely to a required conformity of capitalization to value. Such a showing, it is believed, would be impossible under the laws of most of our Commonwealths.

Peculiar difficulty is presented in the case of systems transformed from horse to electric motive power. Almost none of the public-service corporations, until recent years, seem to have written off any annual amount for depreciation. Mere maintenance, entirely distinct from depreciation, has generally, though not always, been provided for out of current revenue; but nothing further has been covered. As a result, the suddenly imposed necessity of entirely transforming the old plant into scrap, and equipping the system anew, offered a great opportunity to the capitalist. To the original capital, now extinct as far as tangible plant is concerned, could be added the entire cost of electricalization. Such was, indeed, the common practice; and much of the flagrant over-capitalization of

street railways can be ascribed to this fact. On any theory of original investment as a base of capital, it is at first sight not easy to contest the policy.*

The leading case of the so-called "Milwaukee four-cent fare" decision raised this issue.† The constitutionality of an ordinance reducing fares from five to four cents was in question, under the Fourteenth Amendment to the Constitution; and the court was called upon to decide as to the real value of the plant of the street railway company, irrespective of its fictitious capitalization of $15,000,000. Counsel for the city contended that the cost of reproduction at present prices, not the original investment, should be considered as a dividend base. To this objection was properly made that to disallow all costs of original installation, forcing thereby capital to attend upon industrial and price stability, would be to put a severe penalty upon enterprise. And in this particular case, to the reproduction value of the plant of $5,000,000 was allowed an addition of $2,000,000 for "costs of pioneering." Adding to this the capitalization of the *surplus* earnings as a measure of the purchase value, decision was rendered that a four-cent fare yielded an inadequate return; and the ordinance thereupon was set aside.

The practical rule of appraisal generally adopted is, as we have said, to estimate the value according to cost of reproduction. From this, however, in order to determine the *structural value*,—that is to say, the "fair value for the purposes of its use,"—an allowance for depreciation must be made.‡ This must be sharply distinguished from

* Cf. *Report of Bureau of Labor Statistics*, Illinois, 1896, p. 54, on Chicago experience; as also New York *Report on Municipal Ownership of Railroads*, 1896, pp. 1851 and 1865.

† *Street Railway Journal*, 1898, p. 397. *Cf.* also *Municipal Affairs*, iv. (1900) p. 212.

‡ Consult E. Mathieson, *The Depreciation of Factories*, third edition, London, 1893; and L. R. Dicksee, *Auditing*, third edition, London. The Massachusetts Municipal Ownership Act requires depreciation to be charged off at 5 per cent. annually.

allowance for expenses of maintenance,—a distinction often lost sight of in practice. Depreciation is entirely different from loss through "wear and tear." No matter how thoroughly in repair a plant may be kept, under modern industrial conditions it is bound to require entire reconstruction within a calculable time. This time may vary from a very few years in the case of gas retorts, through ten or a dozen for street railway road-bed, and up to fifty years for buildings and permanent structures. The necessity of ultimate reconstruction or replacement is the same in any case.

The English courts have never recognized the economic law that capital must ultimately be replaced from profits.* Not until 1878 was the principle recognized in the assessment of the English income tax. Prior to that time the only deduction from gross income allowed was the average actual expenditure for repairs. A test case then showed the necessity of an additional "just and reasonable deduction" for depreciation. The gas companies in this country seem to have had the facts of depreciation, as distinct from maintenance expenses, impressed upon them by long experience; although in Massachusetts a plethora of reserve funds has been the rule by reason of the strict regulation of stock issues. From the statements of twelve of the largest gas-works in the United States, the charge to depreciation far outweighs that for maintenance and repairs.† On the other hand, it may be stated with certainty that until 1895 almost none of the electric surface roads set off any proportion of profits for this purpose.‡

* *Cf.* article "Capital" in Palgrave's *Dictionary of Political Economy.* Many additional cases will be found in Dicksee's *Auditing.*

† *Fourteenth Report United States Department of Labor*, 1899, p. 387. *Cf.* the excellent paper on "Depreciation in Gas Works," by H. S. Chase, in *The Public Accountant*, Philadelphia, 1900. (Reprint.)

‡ *Ninth Report Bureau of Labor*, Illinois, 1896, p. 56; and *Street Railway Journal*, 1899, p. 403. Consult "How to determine the True Net Earning Power of Street Railway Properties" in *Street Railway Journal*, xvi. (1900) pp. 246–250,

The necessity for such a charge to "deferred operating expenses" formed an interesting element in the Milwaukee four cent fare decision above mentioned.* It appeared that the company until 1896 had made no deduction from gross income for depreciation of the plant. The city, therefore, seeking to establish the fact of exorbitant earnings at the former five-cent rate, sought to compel estimation of these net earnings strictly according to the company's books. The court, however, was constrained to admit the patent fact of depreciation, despite the absence of any writing-off for this purpose by the company; and it was allowed that operating expenses ought really to have been a quarter more than they had been made to appear.† Since this time the almost universal foreign practice of creating a special depreciation fund or of carrying reserve or suspense accounts, has been generally adopted.

It is difficult to excuse this hap-hazard sort of finance on the part of American street railways. Even in Massachusetts they have gone bravely on, reporting a steady decrease in the proportion of operating expenses to gross income,—from upwards of 81 per cent. in 1888 to 68.2 per cent. in 1899.‡ With sounder financial methods, this proportion of operating expenses to gross income perhaps ought to be now apppreciably higher. Failure in earlier days to reckon with this factor is probably due to imitation of the financial methods of the steam roads. So long have these been in operation that American experience

for an adequate discussion of this. As also on reserve and suspense accounts in Ibid., 1898, p. 796.

* *Supra*, p. 123.

† The Milwaukee company's accounts are now models in this respect. *Street Railway Journal*, 1899, pp. 351 and 369. The experience of the West End Railway (Boston) is a case in point. Within six years after the installation of an entirely new nine thousand horse power electric plant, the entire station was remodelled at an expense of $500,000, merely to substitute direct driving engines for power transmission by belts.

‡ *Report Massachusetts Railroad Commissioners*, 1900, p. 74. Cf. *Street Railway Journal*, 1897, p. 214, commenting upon this.

has accurately distributed the proper annual expenditure for repairs, maintenance, and reconstruction, necessary to perpetuate the plant in full efficiency upon a cost of reproduction basis. On European roads the accounts are differently kept. Betterment through reconstruction is more commonly charged to fresh capital account rather than to current operating expenses. Yet the practice of keeping distinct accounts with depreciation is said to be general.

Thus far we have spoken of depreciation as applied to deterioration or supersession of physical plant. Depreciation, or rather perhaps amortization, as it might more properly be called, due to a limited franchise life, is of a different sort. The Massachusetts policy, however, not permitting the capitalization to include any franchise valuation, avoids this difficulty altogether.

We may dismiss the final criterion of capitalization, according to *market value*, with a few words. In the first place, such market price bears no relation to the value of the plant "for the purposes of its use," so long as it is in successful operation. And, even in those cases where subsequent sale may have been contemplated, such a sale, in absence of a continuous open market, might take place at an absurdly low figure under pressure. Thus the Massachusetts Railroad Commissioners refused in the case of the Interstate Railroad Company, above mentioned, to consider the auction price as any fair criterion even of structural value. And, on the other hand, such market price, if it be computed upon the price of securities, can never make distinction between the value of the plant and the worth of the franchise. This, in Massachusetts at least, where no value in the franchise is ever allowed to enter into capitalization, means that the franchise rights merely enhance the market price of the existing issues based upon real property. To allow this market price of securities to enter, even re-

motely, into any calculation of property value, would obviously be to overset the restrictive policy entirely.

The problem of legally restricting the capitalization of an old-established corporation is essentially different from that of controlling the organization of a new one. In order to elucidate this, we must consider separately some of the means by which the volume of corporate securities is increased during the life of the companies. Probably the commonest of these is by the payment to shareholders of so-called stock dividends. These consist either of an outright bonus of new shares of stock or bonds; or, in a mitigated form, as stock sold below par or at less than market quotations. Such "melon-cutting," in the parlance of Wall Street, may range as high as 100 per cent., as in the Adams Express Company dividend of 1898. The notable Boston & Albany distribution of State stock in 1882 is a familiar example. This crudest form of inflation of capital, whether up to or beyond the increasing value of the plant, is the easiest to control directly. And statutory prohibition of the issuance of stock at other than a price fixed at public sale would seem to be easily enforceable.

Another somewhat more subtle mode of accommodation of capitalization to enhanced revenue potential, since it may not really augment the volume of securities outstanding, is to substitute stock issues for funded debt. The tendency in this direction seems to be very marked at the present time among the strongest of the American railroads, such as the New York Central, the Pennsylvania, the Central of New Jersey, New York, New Haven & Hartford, and others.* In some of these, outside of Massachusetts, the primary motive would seem to be to take advantage of rights to issue securities at par, where

* Cf. *Bradstreet's*, xix. p. 356, and xxi. p. 163. The Delaware & Hudson controversy is interesting in this connection: Ibid., xxii. p. 227. *Cf.* also Ibid., xv. p. 534, on reorganizations.

market value is high. But in addition there would seem to be the advantage of great elasticity in future dividend possibilities, within the same limits of total capitalization. Thus a substitution of possible 8 per cent. stock for present 4 per cent. bonds clearly permits of the absorption of greater earnings to be derived in future. The advantages of stock issues over bonds in the way of elasticity downward, is, of course, always to be added; as they permit of a cessation of dividend burdens during periods of depression. Probably for this reason the tendency of most reorganization schemes seems to have been in the direction of retirement of bonds in favor of stocks. This mode of substitution is, however, clearly confined to those companies whose finances are in such excellent condition that their stocks will sell above par. To substitute stocks, which can only be placed on the market at ruinous discounts from par value, for bonds,— which, being well secured legally, are quoted much higher,— would seem to be bad finance. Ability to increase capitalization by stock issues to advantage may in general be taken as evidence of prosperity. The only efficient safeguard for public interests in such cases would seem to be through the right of approval exercised by an able administrative commission, where consent should be required prior to all such substitutions.

The gradual accumulation of a surplus, either by good management or by exceptional opportunities, followed by a petition for its capitalization into stock or bonds, constitutes one of the most troublesome problems in any attempt at strict regulation. For, as will readily be observed, in so far as such a surplus — either in the form of cash, of securities of other companies, or of additions to the original plant — represents augmented investment, it would seem to offer a proper basis for addition to capitalization. It cannot be denied that in this case the property has enhanced in value. Unfortunately for the company,

however, a surplus stands too often in the public eye as witness to abnormal and undeserved earnings in the past. In those Commonwealths which once provided in their early railroad charters for escheat to the State of all earnings in excess of a certain amount, usually 10 per cent.; or those, like Massachusetts, which under the recent law of 1898 provide for a special tax upon dividends of street railways in excess of 8 per cent., such a surplus may denote an actual evasion of legal liabilities.* To permit such deductions from dividends in earlier years to be capitalized at a later date would seem to be, indeed, a flagrant subversion of public policy. On the other hand, in many cases the surplus may not represent undeserved earnings or concealed profits. It may be due to enhanced values in right of way, or in investments, whether of real estate or in securities of other companies; thus in no wise indicating an excessive burden upon the consuming public. Even more difficult of just determination, such surplus may be entirely due to exceptionably able business management by which, even with low rates to the public, economy has come to its deserved fruition. To deny the right to capitalize such accumulated earnings is to penalize enterprise and to discourage economy; neither of which, certainly, is consonant with wise public policy.

As illustrative of the difficulties presented by the above-described situation, we may instance the recent case of the Haverhill Gas Company in Massachusetts. The capitalization of this company — originally, in 1871, fixed at $75,000 — was not increased through years of prosperity, until a surplus amounting to nearly $300,000 had been accumulated. This existed, not as cash or securities, but in the form of plant; that is, in new buildings, enlarged retorts and reservoirs, extensions of mains, and the like. The surplus, moreover, far from being the result of extor-

* The pending suit of the State of New Hampshire against the Manchester & Lawrence railroad is a case in point.

tionate rates for gas, was largely due to exceptional management. This point must be strongly emphasized; for it constitutes the novel element in the case. For years the rate of $1 or $1.10 per thousand cubic feet had prevailed, — a rate recently obtainable only in the metropolitan centre of Boston, and appreciably below that customary in other neighboring cities of equal size. The situation was complicated by the attempt of certain foreign capitalists to water its stock through a lease to a finance company. With this phase of the matter we shall have to do later. For the moment we have to discuss merely the justice of allowing the company directly to realize some return upon these accumulated earnings, through an increase of its capitalization, up to the structural value of the plant. The Gas Commissioners ordered the price of gas reduced to 80 cents, upon petition of the mayor and others, who asked that it be fixed at 70 cents. This figure, it was estimated, would enable the company to pay 8 per cent. dividends upon its original capital, carrying nothing further to surplus. Similar standards, according to the showing of the petitioners for reduction, would give prices per thousand in other cities as follows: Cambridge, $1.02; Fall River, 94 cents; Lowell, 87 cents; Springfield, $1.08; and Worcester, 91 cents.* All of these, as will be noted, are very much above the Haverhill rate.

The argument of the advocate of restriction is to the effect that, even granting the surplus to be a reward of economy and efficient management, and not of extortion, this surplus belongs to the public. It should be regarded merely as a deferred dividend, which reaches the people in instalments, through the low price of gas which the greatly improved plant makes possible; in other words, that municipal ownership of the plant has really ensued, leaving it to be operated, however, by a private company

* *Investigation of Boston Gas Companies*, Committee on Manufactures March, 1900, tables presented by G. W. Anderson, p. 10. (Pamphlet.)

for the fixed rental of 8 per cent. To this contention, answer is made that the argument fails, both theoretically and practically. From the former point of view alone, it is defective, in that it strikes at the root of all enterprise. It confounds this present case with those in which the surplus is a result of exorbitant charges or of deficient service. Its effect would inevitably be to give support to mediocrity of management alone. It is absolutely at variance with the theory that profits form no part of price. For although no direct condition of competition of plants may exist, there being municipal monopoly; yet, the purview of the public being made State-wide through public reports, competitive price conditions prevail, nevertheless. All reward beyond the normal return upon investment being denied to extraordinary economy and ability, no incentive to improvement of service would longer exist. Such extensions and improvements must, however, continually be made in the interest of the public. And herein the practical weakness of too restrictive a program appears. Denied the incentive to accumulation of surplus through economy,— that is to say, discouraged from making additions to the plant necessary for improved service out of operating expenses,— the way is always open to acquire new capital for the same purpose, by an increased issue of stock or bonds. Is it not better that this new capital should be produced from within, allowing the company some participation in the profits through a moderate capitalization of its surplus, rather than that all expenditure for improvement should come from without, thereby saddling upon the consumers the additional interest or dividend charges? A tardy recognition of the cogency of this argument would seem to appear in the refusal of the Commission to order a reduction of the price of gas in Lynn to a strictly minimum profits level.* Whether similar reasoning in the parallel

* Decision rendered May 15, 1900. *House Document*, No. 1351.

Haverhill case would have been followed, could the infamous stock jobbing element have been eliminated, must remain in doubt.

Next in importance to the conversion of a surplus into stock as a means of increasing capitalization, is the expedient of funding contingent liabilities or a floating debt. These may exist in any of their common forms, as loans, bills payable, credited vouchers and accounts, wages and salaries due, or even in the mixed status of receiver's certificates. Such debts are generally indicative of reckless financiering. They may sometimes be necessary to the conduct of a growing business. Nevertheless, an abnormally large proportion of current liabilities, as a rule, is an unfavorable symptom. It implies, as in the familiar examples of the Erie and the Union Pacific Railroads, an inability to raise additional capital as needed, by the sale of bonds. Such a condition is usually the accompaniment of a deficiency of current income, whereby maintenance has to be met in part by a charge to capital account; or, as in the sudden appearance of a gigantic floating debt of $12,000,000 in the case of the Third Avenue Railroad in New York City, it may be a result of corruption or political "bleeding." But, on the other hand, the creation of such a floating debt may sometimes serve as a means to the enlargement of capitalization. This would seem to have been the case of late with public-service corporations in Massachusetts, particularly the electric light and power companies. Denied the expedient of surplus conversion into stock, both by the public policy already discussed and by the great depreciation in the cost of equipment, recourse has most naturally been made to the opposite expedient. Almost ten years ago * the Gas Commissioners called attention to the desire on the part of companies managed by "men of a speculative turn of mind" to cover all expenditure for construction by issues

* *Sixth Annual Report*, 1891, p. 34.

of interest-bearing scrip. A striking example of such financiering occurred in 1895, in the attempt of the Boston Electric Light Company to fund some $240,000 of floating indebtedness.* It appeared that the tangible assets were not equal to the capitalization, presumably because too large a proportion of earnings had been distributed as dividends, leaving too little for maintenance of the plant and writing off for depreciation. "Floating debt, representing the cost of new plant needed to take the place of that which had been worn out and useless, is essentially a part of the expense of carrying on the business, and should be provided for, if possible, out of the earnings. Capital stock has no claims upon the earnings precedent to those of creditors, and not to be governed by this fact is to endanger the well-being of the stock itself." † Oversight of the finances of each company year by year, especially in this matter of the proportion of current income applied to betterment, particularly in a field where falling costs of reproduction prevail, seems to be an essential part of any effective scheme.‡

The consolidation of companies offers a convenient mode of surreptitiously adding to capitalization. This may take place in any one of three ways. In the first place, the merger may lead to reconstruction or replacement of operating plant, with its attendant devices of betterment entirely defrayed by means of new stock issues. This has already been described. Less common is the second method. This consists in gerrymandering the constituent companies, so that those strong ones oppressed with surplus earnings may have aggregated

* *Tenth Annual Report of the Gas Commission*, 1895, p. 42.

† Similar and more recent cases occurred in Malden and Waltham respectively. *Fifteenth Annual Report Gas Commissioners*, 1900, pp. 22 and 39.

‡ A case has been privately cited to me, where a street railway company wishing to make a favorable exhibit of earnings, tore up its recently laid rails, providing for new ones by issue of stock; and then credited the large proceeds from sale of old equipment to current revenue.

about them the roads which are less favorably situated. The claim is openly made * that the Massachusetts Electric Companies, composed of forty odd suburban traction lines, is having its membership so distributed in three main groups, each to be separately operated, as to effect this end. Thus the Lynn and Boston road, earning perhaps twice its legally allowed dividend of 8 per cent., is made to average up its earnings with a number of small roads which are scarcely meeting operating expenses. The result is a 6 per cent. dividend upon their united capital, with a net yield to shareholders far in excess of that contemplated under the law of 1898. The third stock-watering device attendant upon consolidation consists merely in the substitution of a high-grade for a low-grade security. For example, a weak company, whose stock is quoted at 50, is merged in a second operating corporation, with stock, bid, we will say, at 200. This latter company issues new stock worth $200, share for share, in exchange for the $50 stock, which is thereupon cancelled. The legality of such operations under Massachusetts law is open to question. But they would seem to have been not infrequently undertaken in recent years.

The final method of evasion of anti-stock-watering statutes is found in the creation of independent finance corporations, to which the operating company may be leased, sold, or trusteed. The practice may best be made clear by a few examples. In 1893 the Brooklyn City Railroad Company, operating with horse power, was capitalized at $6,000,000. At that time its power was transformed to electricity; and, as has been customary in such cases, the opportunity was seized for an increase of stock and bonds to $18,000,000. Simultaneously the road was leased to the Brooklyn Heights Railroad Company, a tiny corporation operating only a mile of track and capitalized at $200,000. This company agreed to meet in-

* *Street Railway Items*, Boston, October 1, 1900.

terest charges upon $6,000,000 of bonds and to pay 10 per cent. upon the $12,000,000 of stock of the leased company. Finally, in the same year, the Long Island Traction Company, incorporated under the laws of West Virginia with $30,000,000 capital, purchased the stock of the intermediary,—the Brooklyn Heights Company,—in order to absorb such surplus revenue as might remain over and above its obligations to the primary and sole operating concern. Thus was a fivefold increase of capitalization up to the desired figure finally effected.*

The creation of such finance companies has not until recently occasioned much difficulty under the strict prohibitions of Massachusetts law. The Light, Heat, and Power Corporation, organized under the laws of West Virginia, has been attempting since 1898 to operate the electric plants in Milford and Clinton, for example.† It would seem, however, that — legal quibbles aside — a clear case of violation of the statutes could be established. Far more serious is the expedient adopted by the Haverhill Gas Securities Company.‡ This finance concern, by incorporating under the laws of Massachusetts, evaded the provisions of the law of 1894, which declared invalid alone all leases of a domestic to a *foreign* corporation. The new company issued stock to the amount of $500,000, in payment to the owners of the gas company for their original capital of $75,000 and their accumulated surplus of about $300,000. The money necessary for formal compliance with the Massachusetts law requiring all stock issues to be paid up in full was temporarily advanced by the promoters, and paid over to the owners of the gas company in exchange for their property. The next step was to issue and sell 5 per cent. debentures to the amount of $500,000 to recoup

* From letter of Judge Gaynor of the Supreme Court, reprinted in *Report of the Committee upon Municipal Ownership of Railroads* (Albany, 1896), ii. p. 1604.

† *Report Massachusetts Gas and Electric Light Commissioners*, 1900, p. 33.

‡ Ibid., 1900, p. 6.

themselves for their advance, depositing the original stock of the gas light company with a trustee as collateral. Thus the bondholders of the Securities Company virtually paid for the gas-works; while the control of its business remained in the promoters' hands, they retaining the Securities Company's stock of $500,000 as their share of the proceeds. As a net result, then, we find the capitalization of the operating plant, upon which the public are to pay charges, advanced from $75,000 to $1,000,000. Only two remedies were open. One was to annul the charter of the finance company: the other was to reduce the price of gas. This latter course was the one adopted by the Commission, as we have seen, they recommending, also, that the legislature dissolve the company's corporate existence.

Still a third similar mode of evasion, in addition to leases to foreign or domestic finance companies, is being tried in Massachusetts. This is to avoid the corporation laws altogether, by leasing the operating companies to mere business associations. These are, in practice, nothing more nor less than partnerships, with all the provisions of unlimited liability in force. In this respect they closely resemble the New England Gas and Coke Company,* or the real estate trusts, of which there are several in Boston. The leading example of these in the field of quasi-public corporations is the Massachusetts Electric Companies. This association now controls what were originally some forty distinct street railroad companies, forming an unbroken network throughout the eastern quarter of the State. These operating companies have an aggregate stock capitalization of about $9,000,000.† They seem to be slowly consolidating, it is said ‡ with the end in view of

* See the excellent history of this organization in the *Quarterly Journal of Economics*, xiv., 1899, pp. 92–120.

† The bonded indebtedness, amounting to approximately $10,000,000 (?), remains outside the control of the association, largely in the hands of the original purchasers.

‡ *Street Railway Items*, September 15, 1900.

merger in a single corporation, to be known as the Massachusetts Electric Company. The $10,000,000 of stock of this consolidation will then be entirely owned by the Massachusetts Electric Companies' Association, represented by securities outstanding to the amount of $24,000,000. The legal status of this latter organization is as yet undetermined by the courts. In any event, a prompt extension of the provisions of the anti-stock-watering acts to cover all such associations would surely act as a powerful deterrent in future.

Enough has been said to illustrate the extreme complexity of the problem of regulating capitalization, even in the limited class of public-service companies. The ultimate remedy, as applied to all classes of corporations, must come from the courts and the legislatures. But in either case the continued necessity of a strong and steady administrative control through some permanent board or commission, supplementing and giving due effect to the law, is apparent. Massachusetts has not, perhaps, accomplished all that could be desired as yet either in justice to the companies or to the public; but her experience should be of great value, in view of the honest purpose which seems to have inspired it throughout.

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